

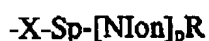
RECEIVED
CENTRAL FAX CENTER

OCT 10 2006

U.S. Patent Application No. 09/672,328
Art Unit: 1625
Page 3AMENDMENTS TO THE CLAIMS

1. (previously presented) A pigment product having attached a) at least one steric group and b) at least one organic ionic group with at least one amphiphilic counterion, wherein said amphiphilic counterion has a charge opposite to that of said organic ionic group, and wherein said pigment is a blue pigment, black pigment, white pigment, brown pigment, cyan pigment, green pigment, violet pigment, magenta pigment, red pigment, yellow pigment, orange pigment, shades thereof, or a combination thereof.

2. (currently amended) The pigment product of claim 1, wherein said steric group has the formula:



wherein X is attached to the pigment and is ~~a-substituted or unsubstituted~~ an arylene group or alkylene group, Sp represents a spacer group, Nlon represents a non-ionic group, R is hydrogen, an aromatic group, or a branched or unbranched alkyl group, and p represents an integer of from 1 to 500; and wherein the spacer group is a bond or a chemical group selected from the group consisting of: CO₂, O₂C, SO₂, CO, NHCO, CONR", NR"CO₂, OCNR", NR"CONR", O, S, NR", SO₂C₂H₄, arylene, alkylene, NR"CO, NHCO₂, O₂CNH, and NCHONH, wherein R", which can be the same or different, represents an aryl or alkyl group.

3. (previously presented) The pigment of claim 2, wherein Nlon is a C₁-C₁₂ alkyl group or a C₁-C₁₂ alkylene oxide group.

4. (cancelled)

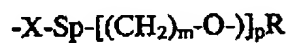
5. (previously presented) The pigment product of claim 2, wherein said non-ionic group is a glycol group.

U.S. Patent Application No. 09/672,328
Art Unit: 1625
Page 4

6. (previously presented) The pigment product of claim 2, wherein X is an aromatic group.

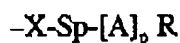
7. (previously presented) The pigment product of claim 2, wherein p is 1 to 50.

8. (previously presented) The pigment product of claim 1, wherein said steric group has the formula:



wherein X is attached to the pigment and is an arylene group or alkylene group, Sp represents a spacer group, m is an integer of from 1 to 12, p is an integer from 1 to 500, and R is hydrogen, a branched or unbranched alkyl group, or an aromatic group; and wherein the spacer group is a bond or a chemical group selected from the group consisting of: CO₂, O₂C, SO₂, CO, NHCO, CONR["], NR["]CO₂, OCNR["], NR["]CONR["], O, S, NR["], SO₂C₂H₄, arylene, alkylene, NR["]CO, NHCO₂, O₂CNH, and NCHONH, wherein R["], which can be the same or different, represents an aryl or alkyl group.

9. (previously presented) The pigment product of claim 1, wherein said steric group has the formula:



wherein X is attached to the pigment and is an arylene group or at least an alkylene group; Sp represents a spacer group, A represents an alkylene oxide group of from about 1 to about 12 carbons; p represents an integer of from 1 to 500; and R represents hydrogen, a branched or unbranched alkyl group or an aromatic group wherein A can be the same or different when p is greater than 1; and wherein the spacer group is a bond or a chemical group selected from the group consisting of: CO₂, O₂C, SO₂, CO, NHCO, CONR["], NR["]CO₂, OCNR["], NR["]CONR["], O, S, NR["], SO₂C₂H₄, arylene, alkylene, NR["]CO, NHCO₂, O₂CNH, and NCHONH, wherein R["], which can be the same or different, represents an aryl or alkyl group.

U.S. Patent Application No. 09/672,328

Art Unit: 1625

Page 5

10. (previously presented) The pigment product of claim 9, wherein X is an aromatic group.
11. (cancelled)
12. (previously presented) The pigment product of claim 9, wherein X is substituted with a carboxylic group or a sulfonate group.
13. (previously presented) The pigment product of claim 9, wherein p is from 1 to 25.
14. (previously presented) The pigment product of claim 9, wherein p is from 26 to 50.
15. (previously presented) The pigment product of claim 9, wherein R is an aromatic group.
16. (previously presented) The pigment product of claim 9, wherein m is 2, p is 44-45, R is a methyl group, and X is a benzoyl group.
17. (previously presented) The modified pigment product of claim 9, wherein m is 2, p is 22, R is a methyl group, and X is a benzoyl group.
18. (previously presented) The pigment product of claim 9, wherein m is 2, p is 44-45, R is hydrogen, and X is a benzoyl group.
19. (previously presented) The pigment product of claim 9, wherein m is 2, p is 7, R is a methyl group, and X is a benzoyl group.
20. (previously presented) The pigment product of claim 1, wherein said steric group has the formula:



U.S. Patent Application No. 09/672,328

Art Unit: 1625

Page 6

wherein X is attached to the pigment and is an arylene group or alkylene group; Sp represents a spacer group, "polymer" represents a polymeric group having repeating monomer groups or multiple monomer groups or both, optionally having at least one -X' group; R represents hydrogen, a bond, a branched or unbranched alkyl group, or an aromatic group; wherein X' is an aromatic group, arylene group, alkyl group, or alkylene group, each X' and X can be the same or different; and the total amount of monomer groups of "polymer" is not greater than about 500 monomer repeating units, and when R represents a bond, R optionally bonds to said pigment; and wherein the spacer group is a bond or a chemical group selected from the group consisting of: CO₂, O₂C, SO₂, CO, NHCO, CONR", NR"CO₂, OCNR", NR"CONR", O, S, NR", SO₂C₂H₄, arylene, alkylene, NR"CO, NHCO₂, O₂CNH, and NCHONH, wherein R", which can be the same or different, represents an aryl or alkyl group.

21. (previously presented) An ink composition comprising a) at least one liquid vehicle; b) at least one pigment product of claim 1.

22. (original) The ink composition of claim 21, wherein said liquid vehicle is aqueous.

23. (original) The ink composition of claim 21, wherein said liquid vehicle is non-aqueous.

24. (original) The ink composition of claim 21, wherein said ink composition is an inkjet ink composition.

25. (original) The ink composition of claim 21, further comprising at least one humectant, at least one binder, at least one dye, at least one biocide, at least one penetrant, at least one surfactant, or combinations thereof.

U.S. Patent Application No. 09/672,328

Art Unit: 1625

Page 7

26. (original) The ink composition of claim 21, wherein said pigment is carbon black, graphite, vitreous carbon, finely-divided carbon, activated carbon, activated charcoal, or mixtures thereof.

27. (original) The ink composition of claim 21, wherein said pigment is carbon black.

28. (cancelled)

29. (previously presented) A printing plate comprising: a substrate, a protective layer located onto said substrate, and an infrared or near-infrared radiation-absorptive layer located on said protective layer, wherein said radiation-absorptive layer comprises at least one pigment of claim 1.

30-31. (cancelled)